

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 6166 (1971): Thin Taper Keys and Keyways [PGD 31: Bolts, Nuts and Fasteners Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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AMENDMENT NO. 1 JANUARY 1987

TO

IS: 6166-1971 SPECIFICATION FOR THIN TAPER KEYS AND KEYWAYS

(Page 3, clause 2.3, informal table's heading) - Substitute the following for the existing heading:

Key	b	8	10	12	14	16	18	20	22	25	28	32	36	40	45	50
Section	h	5	6	6	6	7	7	8	9	9	10	11	12	14	16	18

(Page 3, Explanatory Note) - Add the following Explanatory Note after the text:

EXPLANATORY NOTE

This standard is in line with ISO:2492-1974 'Thin taper keys with or without gibhead and their corresponding keyways', issued by the International Organization for Standardization (ISO).

(EDC 44)

Reprography Unit, ISI, New Delhi, India, India



Indian Standard

REAFFIRMED

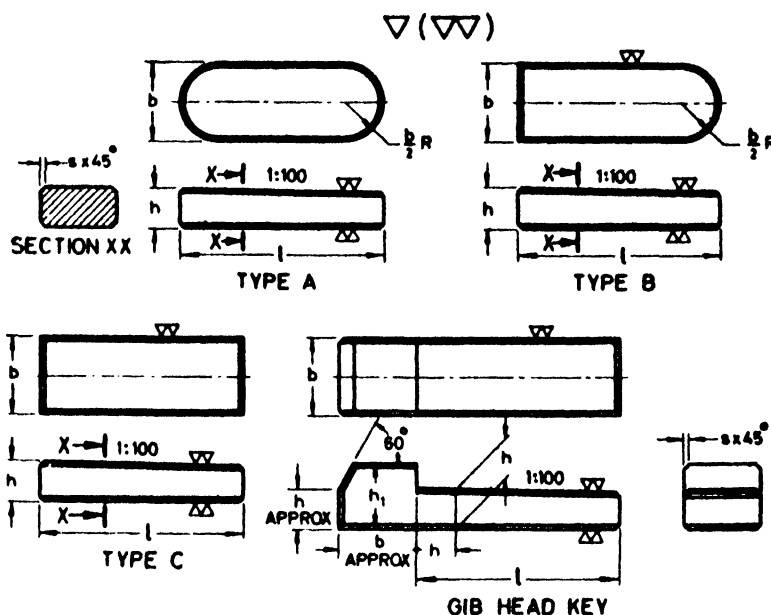
SPECIFICATION FOR THIN TAPER KEYS AND KEYWAYS

2006

1. Scope — Dimensions and tolerances for thin taper keys and keyways.

2. Dimensions

2.1 Keys



All dimensions in millimetres.

b	Tol on b h9	h	Tol on h h11	h ₁	s		Range of Key Length l	
					Min	Max	Min	Max
8	0 -0.036	5	0 -0.075	8	0.25	0.40	20	70
10		6		10	0.40	0.60	25	90
12		6		10	0.40	0.60	32	125
14	0 -0.043	6	0 -0.090	10	0.40	0.60	36	140
16		7		11	0.40	0.60	45	180
18		7		11	0.40	0.60	50	200
20	0 -0.052	8		12	0.60	0.80	56	220
22		9		14	0.60	0.80	63	250
25		9		14	0.60	0.80	70	280
28	0 -0.062	10	0 -0.110	16	0.60	0.80	80	320
32		11		18	0.60	0.80	90	360
36		12		20	1.00	1.20	100	400
40		14		22	1.00	1.20	125	400
45		16		25	1.00	1.20	140	400
50		18		28	1.00	1.20	160	400

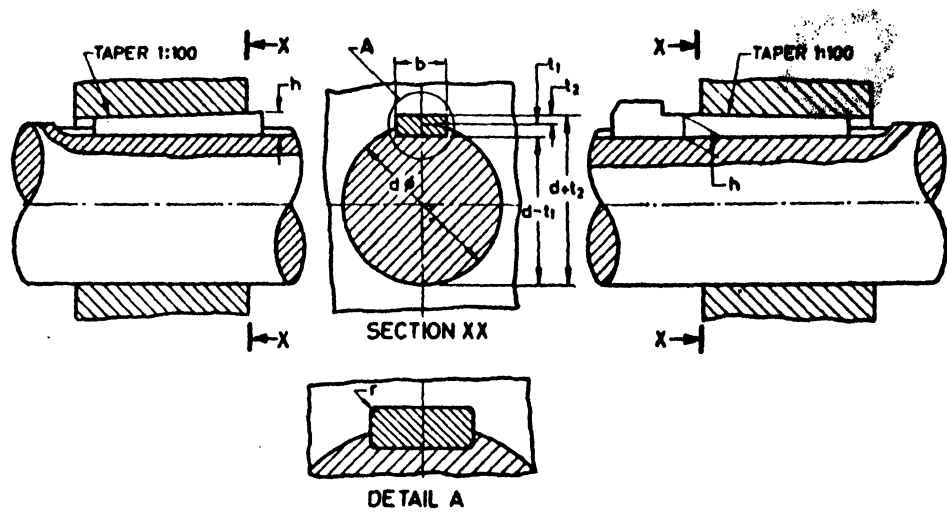
Adopted 23 July 1971

November 1971, ISI

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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 6, BANARAS BHAI ZAFAR MARG
NEW DELHI 110002

2.2 Keyways



All dimensions in millimetres.

Range of Shaft Dia d		Key $b \times h$	Keyway						r	
Above	Up to		b	Tol on b^* D10	t_1	Tol on t_1	t_2	Tol on t_2	Min	Max
22	30	8 × 5	8	+0.098 +0.040	3	+0.1 0	1.7	+0.1 0	0.16	0.25
30	38	10 × 6	10	+0.120 +0.050	3.5		2.2		0.25	0.40
38	44	12 × 6	12		3.5		2.2		0.25	0.40
44	50	14 × 6	14		3.5		2.2		0.25	0.40
50	58	16 × 7	16	+0.149 +0.065	4	+0.2 0	2.4	+0.2 0	0.25	0.40
58	65	18 × 7	18		4		2.4		0.25	0.40
65	75	20 × 8	20		5		2.4		0.40	0.60
75	85	22 × 9	22		5.5		2.9		0.40	0.60
85	95	25 × 9	25	+0.180 +0.080	5.5		2.9	+0.2 0	0.40	0.60
95	110	28 × 10	28		6		3.4		0.40	0.60
110	130	32 × 11	32		7		3.4		0.40	0.60
130	150	36 × 12	36		7.5		3.9		0.70	1.00
150	170	40 × 14	40		9		4.4		0.70	1.00
170	200	45 × 16	45		10		5.4		0.70	1.00
200	230	50 × 18	50		11		6.4		0.70	1.00

*Tolerance applicable to keyway width b in shaft and hub.

2.3 Preferred Length of Key

Key Section	$\frac{h}{b}$	5	6	6	6	7	7	8	9	9	10	11	12	14	16	18
		8	10	12	14	16	18	20	22	25	28	32	36	40	45	50
Length of Key	20	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	25	25	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	28	28	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	32	32	32	32	—	—	—	—	—	—	—	—	—	—	—	—
	36	36	36	36	36	—	—	—	—	—	—	—	—	—	—	—
	40	40	40	40	40	—	—	—	—	—	—	—	—	—	—	—
	45	45	45	45	45	45	—	—	—	—	—	—	—	—	—	—
	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—	—
	56	56	56	56	56	56	56	56	—	—	—	—	—	—	—	—
	63	63	63	63	63	63	63	63	63	—	—	—	—	—	—	—
	70	70	70	70	70	70	70	70	70	70	—	—	—	—	—	—
	80	—	80	80	80	80	80	80	80	80	80	—	—	—	—	—
	90	—	90	90	90	90	90	90	90	90	90	90	—	—	—	—
	100	—	—	100	100	100	100	100	100	100	100	100	100	—	—	—
	110	—	—	110	110	110	110	110	110	110	110	110	110	110	—	—
	125	—	—	125	125	125	125	125	125	125	125	125	125	125	125	—
	140	—	—	—	140	140	140	140	140	140	140	140	140	140	140	—
	160	—	—	—	—	160	160	160	160	160	160	160	160	160	160	160
	180	—	—	—	—	180	180	180	180	180	180	180	180	180	180	180
	200	—	—	—	—	—	200	200	200	200	200	200	200	200	200	200
	220	—	—	—	—	—	—	220	220	220	220	220	220	220	220	220
	250	—	—	—	—	—	—	—	250	250	250	250	250	250	250	250
	280	—	—	—	—	—	—	—	—	280	280	280	280	280	280	280
	320	—	—	—	—	—	—	—	—	—	320	320	320	320	320	320
	360	—	—	—	—	—	—	—	—	—	—	360	360	360	360	360
	400	—	—	—	—	—	—	—	—	—	—	—	400	400	400	400

3. Designation — A thin taper key of Type A having width 10 mm, height 6 mm and length 25 mm shall be designated as:

Key A 10×6×25 IS : 6166

4. Tolerances on Length of Key and Keyway

Length of Key mm	Tolerance on Key mm	Tolerance on Keyway mm
Up to 28	−0.2	+0.2
32 to 80	−0.3	+0.3
90 and above	−0.5	+0.5

5. Material of Key — Carbon steel of tensile strength not less than 600 MN/m² (60 kgf/mm² approximately).